In dipper patients the LF/HF was higher during daytime compared to the night (3.3 ± 0.5 vs 2.05 ± 0.27, p = 0.0041) where as no significant difference was noticed in non dipper patients (3.3 ± 0.24 vs 2.7 ± 0.33, p = NS).

Conclusion: these results suggest that despite similar global HRV and HRT parameters in dippers and non dippers, non dipper patients have an imbalance of the circadian sympathic-vagal tonus pattern with a high nocturnal sympathic tonus. These data may partially explain the higher incidence of cardiovascular events reported in non dipper patients.

237

Assessment of blood pressure control after surgical treatment of acute thoracic aortic disease

Gilles Barone-Rochette (1), Laetitia Boggetto-Graham (1), Helene Pierre (2), Olivier Chavanon (3), Jean-Philippe Baguet (2)
(1) CHU Grenoble, USIC, Grenoble, France – (2) CHU de Grenoble, service HTA, Grenoble, France – (3) CHU Grenoble, service de chirugie cardiaque, Grenoble, France

Purpose: Hypertension is an important predisposing factor for the occurrence of acute type A aortic dissection (AD) or intramural hematoma (AH), both conditions requiring urgent surgical treatment. It is also a recognized pejorative factor for morbidity and mortality after aortic surgery. Despite of this, the assessment of blood pressure (BP) control after surgical treatment of AD or AH is little studied.

Method: We performed a pilot study among patients treated by surgery for AD or AH between 1990 and 2005 in our institution. Clinical BP measurement and 24 hours ambulatory BP monitoring (ABPM) were performed especially for the study.

Results: Among the 217 patients of the cohort, 81 were died. We analyzed the results of the first 43 surviving patients (34 men, mean age = 66 + 10 years). Clinical BP parameters were: systolic BP = 148 + 24 mmHg and diastolic BP = 81 + 11mmHg. ABPM results were: 24-hours systolic BP = 127 + 15 mmHg and 24-hour diastolic BP = 70 + 9 mmHg). The mean number of drugs for hypertension was 2.6 + 1.2. Thirty two patients (72%) received a beta-blocker and 20 patients (46%) an angiotensin-converting enzyme inhibition. At mean follow-up of 14 years, Hypertension was diagnosed in 34 (79%), 26 (60%) of the patients using respectively clinic and ABPM.

Conclusion: In this very high cardiovascular risk population, only 21% and 40% patients were normotensives in clinic and in ABPM respectively. This result must be improved using a more systematic BP follow-up by cardiologists, particularly by using systematically ABPM. Moreover, the number of antihypertensive drugs must be increased to improve the BP control.

238

Comparison of the clinical profiles of hypertensive patients with a history of heart failure and reduced versus preserved left ventricular ejection fraction – the O-PREDICT 2 study

Jean-Jacques Mourad (1), Nacima Demil (2), Gilles Errieau (3), Jean-François Aupetit (4), François Dievart (5), Albert Hagège (6)
(1) Hôpital Avicenne, Département de médecine interne, Bobigny Cedex 09, France – (2) AstraZeneca, Reuil Malmaison Cedex, France – (3) Cabinet médecine générale, Paris, France – (4) CH St Joseph – St Luc, Service de Cardiologie D, Lyon, France – (5) Clinique Villette, Service de Cardiologie, Dunkerque Cedex, France – (6) HOPITAL EUROPEEN GEORGES POMPIDOU, Service de cardiologie A, Paris Cedex 15, France

While the links between high blood pressure and heart failure (HF) are well known, the clinical profiles of hypertensive patients (pts) according to measure of left ventricular (LV) ejection fraction (EF) remain poorly investigated. O-PREDICT 2 was a multicentre observational study conducted among 1537 general practitioners who classified 4427 hypertensive outpatients (pts) (mean age 72±9 years; 66% males)according to the presence (Group 1, 2969 Pts) or absence (Group 2, age > 65 years) of a history of clinical HF. The study cohort included 2052 (46.4%) pts with an available measure of LVEF, 1713 (58%) from group 1 and 350 from group 2.

Results: In group 1, 677 (39.5%) pts had a reduced EF ≤ 40% (1A) and 1036 (60.5%) had a preserved EF > 40% (1B), while, in group 2, 330 (94.3%) had a preserved EF. When comparing groups 1A, 1B and 2, a significant difference (p<.05) was found for history of hospitalization for HF (70.3%, 59.2% and 0%, respectively), SBP ≥ 140 mmHg (35%, 47.7% and 53.6%), coronary artery disease (52.2%, 40.4% and 15.2%), and myocardial infarction (69.2%, 52.3% and 46.8%). Incidence of atrial fibrillation (AF) was 11% in group 2 while in groups 1A and 1B it differed according to the NYHA functional class, reaching respectively 50.1% and 62.9% of the pts in class II, and 39.5% and 24.6% of the pts in class III. Reduced EF was more frequent in male (74% in group 1A vs. 64.2% in group 1B and 63.6% in group 2) than in female (26% vs. 35.8% and 36.4%, respectively). LV hypertrophy, cardiovascular disease, renal failure or arteriopathy, were evenly distributed in groups 1A and 1B.

Conclusion: Among hypertensive pts with a clinical history of HF, pts with preserved HF are more often female and presented with AF, while pts with systolic HF are more often hospitalized or presented with a history of coronary artery disease. However, even in case of preserved EF, the rates of hospitalizations and myocardial infarction remain markedly elevated (> 50%)

239

Should we screen masked hypertension in patients with vascular disease?

Pascal Delsart (1), Philippe Marboeuf (1), Cedric Delhaye (2), Jean-Marc Lablanche (2), Jean-Paul Beregi (3), Claire Mounier-Vehier (1)
(1) chru Lille, Médecine Vasculaire et HTA, Lille, France – (2) chru Lille, Cardiologie b et Hemodynamique, Lille, France – (3) chru Lille, Radiologie et Imagerie cardiaque et vasculaire, Lille, France

Objective: In this study we investigated the interest to detect masked hypertension (MH) in a population of patients with no prior history of hypertension, at very high cardiovascular risk and who received hypotensive medications prescribed for their vascular disease, as angiotensin- converting enzyme inhibitor (ACE).

Design and Method: In this prospective study, 38 patients were send to our unit for the realisation of a coronarography or an arteriography. Subjects have no prior history of hypertension, with a blood pressure (BP) at admission under 140/90 mmHg, and documented vascular disease. They underwent a 24-h ambulatory BP monitoring(ABMP) after discharge. Subjects who showed normotension at admission and an ambulatory BP under 125/80 mmHg on the 24-h ABMP were considered as normotensive (NT). Subjects who showed normotension at admission and an ambulatory BP upper or equal to 125/80mmHg were defined as MH.

Results: MH was found in 11 patients, represented 28.9 % of our population. The prevalence of MH was significantly higher in subjects whose mean systolic BP and mean diastolic BP (127.2 mmHg vs 115.8 mmHg, p=0.002 and 76.1 mmHg vs 66.6 mmHg, p=0.01) during the hospitalisation than the confirmed NT did. At admission the systolic BP and the pulse pressure tend to be higher in the MH group than in the NT group (127.5 mmHg vs 121 mmHg, p= 0.07 and 54.5 mmHg vs 46.7 mmHg,p=0.06). The first measurement of blood pressure of the 24-h ABPM, who was considered as a pressure of consultation, was significantly higher in the MH group than in the NT group (140 mmHg vs 121 mmHg, p = 0.001 for the systolic BP and 84 mmHg vs 74 mmHg, p=0.03, for the diastolic BP).

Conclusions: MH is frequent in our population with a documented vascular disease under medication, with no prior history of hypertension. The screening of MH hypertension in this population seems to be necessary. The pre hypertensive rank seems to be a good predictor of MH.

▶